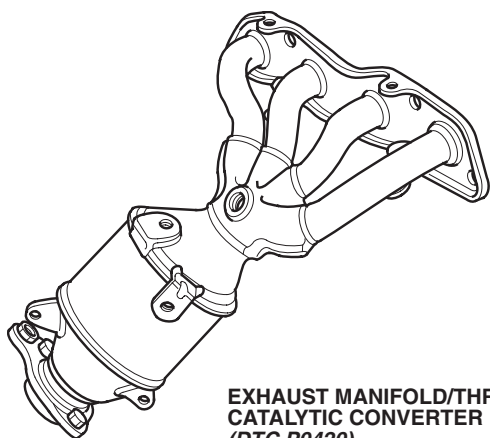


Replace the Correct Three-Way Catalytic Converter for DTC P0420, P1420, or P2000

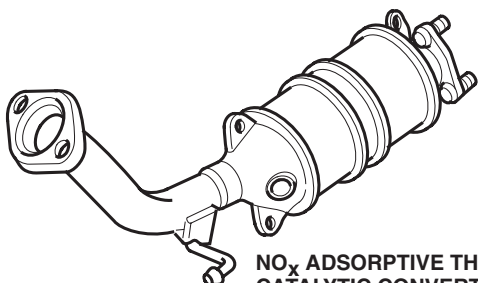
All 2003–05 Civic Hybrids (ULEV and SULEV models) have *two* three-way catalytic converters (TWCs). If a TWC fails, it's very important to know which one has failed and to order its correct replacement part. If you replace the wrong TWC, or you replace the failed TWC with the wrong part, you could wind up with a comeback from your customer.

One TWC is near the cylinder head, and it's part of the exhaust manifold. If it fails, it causes DTC P0420 (catalyst system efficiency below threshold) to set.



EXHAUST MANIFOLD/THREE-WAY CATALYTIC CONVERTER (DTC P0420)

The other TWC is mounted under the floor to exhaust pipe B. The under-floor TWC is either a NO_x adsorptive TWC (ULEV models) or a conventional TWC (SULEV models). If the NO_x adsorptive TWC fails, it causes either DTC P1420 (NO_x adsorptive catalyst system efficiency below threshold) to set in '03 ULEV models or DTC P2000 (NO_x adsorptive catalyst system efficiency below threshold) to set in '04–05 ULEV models. There's no DTC set if the under-floor TWC fails in a SULEV model.



NO_x ADSORPTIVE THREE-WAY CATALYTIC CONVERTER (ULEV)
(DTC P1420 - '03 Models
DTC P2000 - '04–05 Models)

THREE-WAY CATALYTIC CONVERTER (SULEV)
(No DTC set)

Ordering replacement TWCs from the Parts Catalog can be a little tricky. The TWCs are listed in different sections of the catalog. You'll find the exhaust manifold/TWC listed in the Engine section and the two under-floor TWCs listed in the Electrical/Exhaust/Heater/Fuel section.

To ensure you're ordering the correct replacement part, you also need to know the vehicle's emission type. Do a VIN status inquiry on the *iN* to get this info.

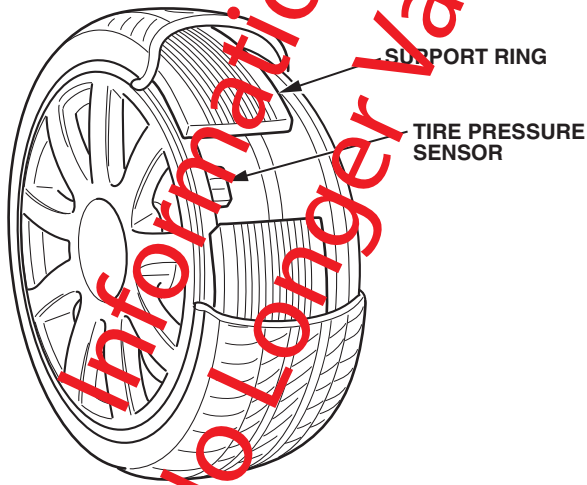
1. From the *iN* main menu, click on **SERVICE, Vehicle Information**, and then **VIN Status Inquiry**.
2. Enter the VIN, and then click on **Submit**.
3. Look at the **EMISSION TYPE** entry. You'll see either **KA** (ULEV, 49 states) or **KL** (SULEV, California only).

You can save yourself the hassle of ordering from the Parts Catalog by using this chart. Just match the set DTC to the vehicle's emission type, and you can't go wrong.

DTC	Emission Type	Part Number	Honda Code
Exhaust Manifold/Three-Way Catalytic Converter			
P0420	KA (ULEV)	18160-PZA-A00	7101025
	KL (SULEV)	18160-PZA-L00	7383201
NO_x Adsorptive Three-Way Catalytic Converter (Under-Floor)			
P1420 '03 Models P2000 ('04–05 Models)	KA (ULEV)	18190-PZA-A00	7101058
Three-Way Catalytic Converter (Under-Floor)			
N/A	KL (SULEV)	18190-PZA-L00	7383219

Repairing PAX System Tires

All '05 Odyssey Touring models come with the Michelin PAX system. This system includes special tires and wheels with support rings and tire pressure sensors.



The PAX system lets you drive up to **125 miles** at speeds up to **50 mph** with one or more of the tires low or flat. If you run a tire beyond that limit, you risk serious damage to the tire. The 125-mile limit gives you an ample range to get to a Honda dealer for service.

If a customer gets a flat tire, he or she needs to find the nearest Honda dealer. All Honda dealers stock PAX tire/wheel assemblies, but they don't have the special equipment to do actual tire repair. To ensure customer satisfaction, Honda dealers should make every attempt to get the tire repaired. This means subletting the repair, including sending out the tire to a PAX-certified Michelin store.

If a Honda dealer isn't easily accessible (it's after hours, it's a weekend or a holiday, the customer is more than 125 miles away), the customer calls the Michelin PAX help hotline at **877-PAXTIRE (877-729-8473)**. The hotline is set up to help customers on a 24/7 basis. The hotline will find the customer a PAX-certified Michelin store. The techs at these stores have the training and special equipment needed to service the PAX system and replace PAX system components.

Pax System Tire Chains Now Available

Old Man Winter is going to be a little easier to deal with for '05 Odyssey Touring owners. Tire chains are now available for the PAX system tires. Honda has approved the PL Type (Stock No. 1142) from the LaClede Chain Manufacturing Company. These tire chains are available at various retail auto supply stores.



Use Trim Pad Remover Set To Remove Center Panel

There's a right tool for every job. When you need to remove the plastic center panel in a '03-05 Pilot, the Trim Pad Remover Kit (SOJATP2014) makes short work of it without scratching or damaging the panel.

This special tool consists of four individual trim tools, molded in durable, purple plastic. For removing the center panel, we highly recommend using the trim pad remover AP201-10A. And for best results, make sure you use the tool's shallow-angled end.

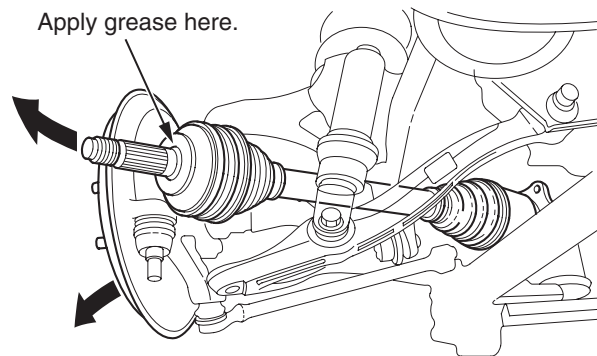


If you need to order more tool sets, call the Honda Tool and Equipment Program at **888-424-6857**.

Creak or Grunt From Rear of Vehicle at Low Speeds: '00–05 S2000

Getting complaints from owners of '00–05 S2000s of a creak or grunt from the rear of the vehicle when cornering or driving at low speeds? The problem could be there's movement between the outboard joint and the wheel hub. To get rid of this noise, you need to clean and lube the mating surfaces of the outboard joint and the wheel hub. Here's how:

1. Remove the wheel nuts and the rear wheel.
2. Lift up the stake on the spindle nut, and remove the nut.
3. Remove the cotter pin from the lower arm ball joint castle nut, and remove the nut
4. Separate the ball joint from the lower arm.
5. Pull the knuckle outward, and use a plastic hammer to remove the outboard joint from the wheel hub.
6. Clean the mating surfaces of the outboard joint and the wheel hub.
7. Apply a thin layer of DC111 silicone compound to the face of the outboard joint. This compound reduces the friction between the joint and the wheel hub so the noise won't happen again.



8. Pull the knuckle outward, and install the outboard joint to the wheel hub.
9. Reconnect the ball joint to the lower arm. Torque the castle nut to **69 N·m (51 lb-ft)**, then tighten it only far enough to align the slot with the ball joint pin hole. Install a new cotter pin.

10. Clean the wheel hub and the spindle threads.
11. Lubricate the seating surface of a new spindle nut with engine oil, then install the nut. Torque the nut to **245 N·m (181 lb-ft)**. Use a drift to stake the spindle nut shoulder against the driveshaft.
12. Reinstall the rear wheel. Torque the wheel nuts to **108 N·m (80 lb-ft)**.
13. Repeat steps 1 thru 12 for the other outboard joint.

Registering Replacement XM Receivers

Replacing an XM receiver in a '04–05 Accord, '05 Element, or '05 Odyssey? Make sure you register the replacement receiver with XM. This lets XM know there's a different receiver in the vehicle. Here's how:

1. Before unplugging the XM receiver, tune the radio to XM channel 0, and write down the eight-digit XM radio ID number in the radio display.
2. After installing the replacement XM receiver, tune the radio to XM channel 0, and write down the eight-digit XM receiver ID number in the display.
3. Call XM at **800-852-9696**. When you call, have your dealer number, the VIN, and the XM radio ID numbers you wrote down for both the original XM receiver and its replacement. When you hear the automated menu, enter the Honda priority code **9466** to route your call to an XM agent.

S/M Fix: Cruise Control Unit Input Test; '03–05 Accord

You need to tweak step 3 of the Cruise Control Unit Input Test on page 4-52 of the 2003–05 Accord S/M. To properly test the BLU/WHT wire at cavity 12, the 14P connector must be plugged into the cruise control unit. In your copies of the S/M, add this text under the **Test condition** column for cavity 12: **NOTE: This input test must be done with the 14P connector reconnected.**

S/M Fix: Cylinder Head Location Index, '05 Odyssey

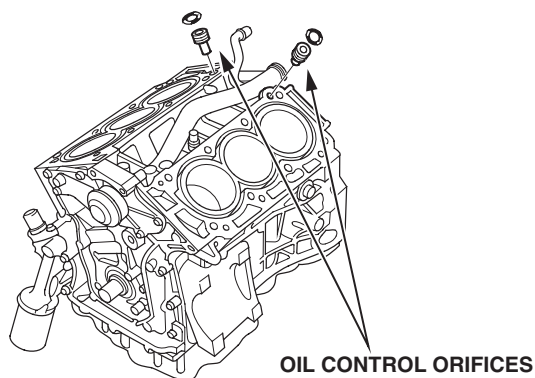
The Engine Mechanical section of the 2005 Odyssey S/M needs a bit of fine tuning. The cylinder head component location index on page 6-4 isn't specific about which engine type it applies to. Make a note that it applies to the **J35A6** engine. This engine doesn't have Variable Cylinder Management (VCM). It's the conventional type installed in the LX and EX models.

The S/M doesn't have a cylinder head component location index for the **J35A7** engine with VCM, the type installed in the EX-L and Touring models. A component location index for this engine type will be added in the next revision of the S/M.

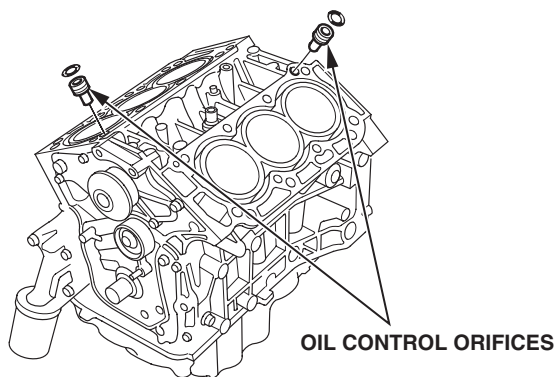
If you're doing major repair work on either of these engine types, it's important to know where the oil control orifices are located. The locations vary between these two types, and if you install these orifices in the wrong spot, you could cause long term damage to the engine.

Here are the oil control orifice locations for each engine type:

J35A6 Engine (LX and EX Models)



J35A7 Engine (EX-L and Touring Models)



Use *Only* New GF-4 Standard Engine Oil

There's a new performance standard for engine oil: GF-4. It was jointly developed by automotive and oil experts, and it represents a significant performance upgrade and improvement in fuel economy. GF-4 engine oils must pass grueling tests totaling over 500 hours. On top of this, Honda Genuine engine oils are also tested to ensure specific compatibility with Honda vehicles.

GF-4 engine oil is compatible with all current and earlier model year Honda cars and trucks. It also provides these added benefits:

- Improved oxidation resistance (reduced thickening of the oil)
- Improved deposit protection and better wear protection
- Better low-temperature performance over the life of the oil
- Environmental protection by extending the life of emissions systems

While Honda has upgraded its engine oil to GF-4, other brands may not yet be at this new standard. Keep in mind you must use Honda Genuine engine oil for all warranty repairs. If you use some other brand of oil for non-warranty repairs, make sure that oil meets the GF-4 standard. We recommend you stop using non-GF-4 engine oils and check with your supplier that you're purchasing GF-4 oil.

Engine oil produced after April 1, 2005, that meets the GF-4 standard, must post this starburst certification mark on the container:



Always look for this mark; some oil container labels won't specifically refer to GF-4.

Tips from Training: ASE Testing Goes Bilingual

Beginning with the Spring 2005 test session on May 5th, the National Institute for Automotive Service Excellence (ASE) will be offering three of its Automobile/Light Truck tests in a parallel English-Spanish format. Those tests are A1 - Engine Repair, A4 - Suspension and Steering, and A5 - Brakes. In the Fall 2005 administration, a fourth test, A6 - Electrical/Electronic Systems, will be added.

ASE will be offering this bilingual format only for its regular certification tests; not for any of its recertification tests. All of the test forms for the three selected tests will have both English and Spanish sections, making the bilingual format available at all 750+ test centers nationwide. The selected tests for this offering are those most often taken by first-time test takers, and these tests are in high demand by employers.

This program is made possible by a \$300,000 grant from the U.S. Department of Labor to provide a limited number of ASE certification exams in a parallel English-Spanish format. According to government figures, more than 150,000 Hispanics make their living as auto service techs in the U.S. And of that total, about 60,000 are believed to be limited English-speaking.

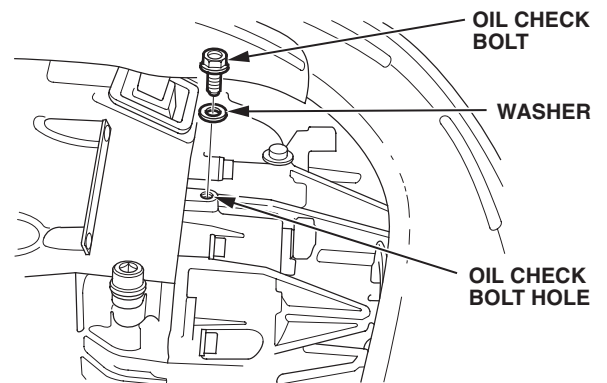
This program is intended to reach out to that group, and offer them the opportunity to participate in the ASE certification program while they continue to hone their English skills. For more info about ASE, visit their web site at www.ase.com.

Just a reminder! The registration deadline for the Spring test session is **March 25, 2005**. Test centers are assigned on a first-come, first-serve basis, so register early!

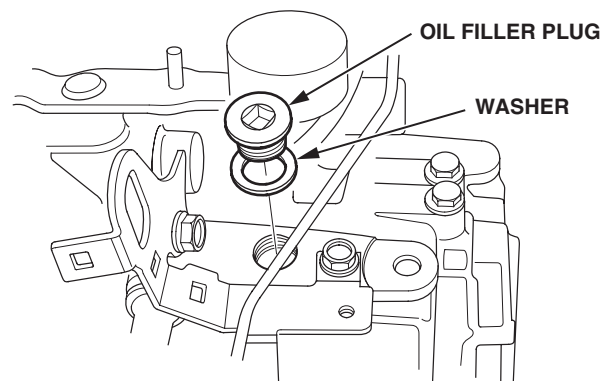
MTF Leak? Check for Overfilling

Got a '03-05 6-speed Accord V6 in your shop that's leaking MTF? Before you start troubleshooting, make sure the M/T isn't just overfilled. The M/T in these vehicles has a vent tube inside the clutch housing. If the M/T is overfilled, MTF will leak out the vent tube between the engine and the M/T.

Checking the MTF level is really pretty simple. Just remove the oil check bolt and its washer. The MTF level should be no higher than the bottom of the oil check bolt hole. If the MTF level is higher than the hole, the MTF will drain out the hole until the level is right.



If the MTF level is lower than the bottom of the oil check bolt hole, you'll need to top off the MTF. Remove the oil filler plug and its washer. Add Honda MTF through the oil filler plug hole until it starts running out the oil check bolt hole.



Once the MTF stops running out the hole, reinstall the oil check bolt with a new washer. Torque the bolt to **12 N·m (8.7 lb-ft)**. Install the oil filler plug with a new washer. Torque the plug to **44 N·m (33 lb-ft)**.

S/M Fix: Fuel Pressure Regulator Spec, '03–05 Accord V6

You need to fix the fuel and emissions table on page 2-5 of the 2003–05 Accord V6 S/M Supplement. The fuel pressure regulator spec is now the same for all models. Mark up your copies of the S/M to look like this:

Item	Measurement	Qualification	Standard or New
Fuel pressure regulator	Pressure with fuel pressure gauge connected		380–430 kPa (3.9–4.4 kgf/cm ² , 55–63 psi)

S/M Fix: DTC Troubleshooting, '03–05 Civic Hybrid

The DTC Troubleshooting Index on page 11-10 of the 2003–05 Civic Hybrid S/M requires some tweaking. You need to include DTC P0339 (CKP sensor intermittent signal interruption). This DTC applies to '04–05 models. DTC P0336 (CKP sensor intermittent signal interruption) applies to just '03 models. Mark up your copies of the S/M to look like this:

DTC (MIL indication*)	Temporary DTC	Detection Item	MIL	Note
P0336 (4)*7	-----	Crankshaft Position (CKP) Sensor Intermittent Signal Interruption	ON	(see page 11-126)
P0339 (4)*8	-----	Crankshaft Position (CKP) Sensor Intermittent Signal Interruption	ON	(see page 11-126)

On page 11-126, you also need to revise the subhead for DTC P0336 and add a subhead for DTC P0339. Mark up your copies of the S/M to look like this:

DTC P0336: CKP Sensor Intermittent Signal Interruption
(2003 models)

DTC P0339: CKP Sensor Intermittent Signal Interruption
(2004–05 models)

Taking High-Speed Snapshots with the HDS

Need to take some high-speed snapshots with the HDS? High-speed snapshots sample the data you select every **0.2 second** and provide a great means for diagnosing DTCs and driveability problems. To take high-speed snapshots, follow these steps:

1. Connect the HDS to the 16P data link connector (DLC). Turn the ignition switch to ON (II). Turn on the HDS.
2. At the screen prompts, enter the VIN (if you're asked) and the odometer reading.
3. From the **Select Mode** screen, select **Honda Systems**. From the **System Selection Menu**, select **PGM FI**.
4. From the **Mode Menu**, select **Snapshot**.
5. Select the icon that looks like a wave form on the right side of the display screen.
6. Select up to 10 different items that you want to capture in the snapshot. After you make your selections, touch the green check mark (✓).
7. If the criteria is correct, touch the blue check mark (✓). The HDS is now locked and loaded; you're ready to take a high-speed snapshot.

To send your high-speed snapshots to Tech Line, see the article "Sending HDS Snapshots to Tech Line" in the October '04 issue of *ServiceNews*.



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